

Setting Alexandria Police Hospital.

Results 86% of patients with bronchial asthma lived in urban areas, while 64% of patients with parasitic infestation lived in rural areas. Statistically significant Negative correlations were found between blood level of IgE and FEV1% of predicted in patients with bronchial asthma as well as patients with parasitic infestation with $r=-0.381, -0.325$ at $p=0.006, 0.021$ respectively. Inverse relationship was found between blood level of IgE and FEV1/FVC% in patients with parasitic infestation with $r=-0.358$ with statistical significant difference at $p=0.011$.

Conclusions Statistically significant higher values of IgE were found in patients with parasitic infestation compared to patients with bronchial asthma. It was noted that patients with combined bronchial asthma and parasitic infestation demonstrated statistically significant higher values of IgE which suggest a possible synergistic effect of two diseases.

Recommendation Improving personal and environmental hygiene and regular screening, treatment and health education for children as regard parasitic infections is recommended.

	Asthmatic (n= 48)	Parasitic (n= 47)	Combined (n= 5)	KW	p
IgE					
Min. – Max.	100.0-490.0	122.0-900.0	850.0-1003.0		
Mean ± SD.	258.35±106.58	400.79±196.79	938.40±63.56	26.302*	<0.001*
Median	247.0	344.0	950.0		
Sig. Bet. Grps.	$p_1<0.001^*, p_2<0.001^*, p_3<0.001^*$				

KW: Kruskal Wallis test, Sig. bet. grps was done using Mann Whitney test

p_1 : p value for comparing between asthmatic and parasitic group

p_2 : p value for comparing between asthmatic and combined group

p_3 : p value for comparing between parasitic and combined group

*: Statistically significant at $p \leq 0.05$.

Abstract P70 Figure 1 Comparison between the three groups according to IgE.

P71 **MEPOLIZUMAB IN ADOLESCENTS WITH SEVERE EOSINOPHILIC ASTHMA NOT ELIGIBLE FOR OMALIZUMAB: ONE CENTRE'S EXPERIENCE**

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10.1136/thoraxjnl-2017-210983.213

Introduction Mepolizumab is an anti-interleukin-5 monoclonal antibody shown to reduce asthma exacerbations in adults and adolescents with severe eosinophilic asthma.¹ The Scottish Medicines Commission has accepted it for restricted use in adults as an add-on treatment for severe refractory eosinophilic asthma. Here we describe the use of Mepolizumab as an unlicensed medicine with local approval for use in adolescents with severe asthma.

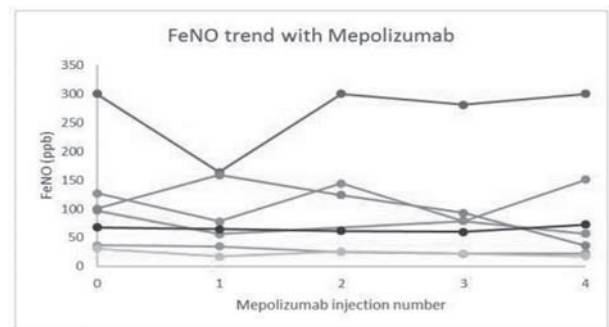
Methods Mepolizumab was offered to adolescents with severe eosinophilic asthma not eligible for Omalizumab because of previous allergic reaction (n=2) or failure to respond (n=1) to Omalizumab, or excessively high IgE (n=4). Eosinophilic asthma was confirmed: blood eosinophil count ≥ 300 cells/ μ L or exhaled nitric oxide concentration (FeNO) ≥ 50 ppb in the previous year. All received high-dose ICS +LABA and had low ACT scores (mean 10.4 ± 2.88). Four were on daily oral steroids. Mean exacerbations requiring oral steroids in the previous year were 4.9 ± 1.68 . Prior to commencing and before each monthly injection, pulmonary function (FeNO and forced expiratory volume in 1 s (FEV₁)), blood eosinophil count, Asthma Control Test (ACT) and Paediatric Asthma Quality of Life Questionnaire (PAQLQ) were measured. Long-term medications not adjusted. Data from clinical case notes.

Results Seven adolescents (mean age 13.9 ± 1.9 , range 11–17 years; 5 males, 2 females) each received 4 Mepolizumab doses (100 mg sc) at monthly intervals with no serious adverse reactions. Blood eosinophil count decreased in all (mean pre-treatment $0.8 \pm 0.62 \times 10^9$ cells/L, $0.1 \pm 0.06 \times 10^9$ cells/L after 4 doses). ACT score improved in 6/7 patients (86%) (mean pre-treatment $10.4 \pm 2.88, 13.6 \pm 5.16$ after 4 doses). PAQLQ improved in 4/7 patients (57%) (mean pre-treatment $3.8 \pm 1.30, 4.4 \pm 1.41$). We did not demonstrate improvement in FEV₁. Mean FeNO was -15 ± 29 ppb (figure 1). During treatment, none required hospitalisation for asthma attacks, 2/7 patients (29%) were attack free, 5/7 patients (71%) had reduced attack frequency.

Conclusion In adolescents with refractory eosinophilic asthma not eligible for Omalizumab, these data suggest that Mepolizumab is well tolerated, reduces risk of exacerbations, may improve asthma control and quality of life but does not improve lung function.

REFERENCE

1. Pavord ID, et al. Mepolizumab for severe eosinophilic asthma (DREAM): a multicentre, double-blind, placebo-controlled trial. *Lancet* 2012;380(9842):651–9.



Abstract P71 Figure 1

Pulmonary rehabilitation: walk this way

P72 **IS THE USE OF A NOVEL HIGH FREQUENCY AIRWAY OSCILLATING DEVICE FEASIBLE FOR THE MANAGEMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE?**

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10.1136/thoraxjnl-2017-210983.214